

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Original): An isolated polynucleotide encoding a polypeptide controlling the flowering time of plants, wherein the polypeptide comprising an amino acid sequence having at least 70% sequence homology to an amino acid sequence of SEQ ID NO: 2, or comprising the amino acid sequence of SEQ ID NO: 2.

Claim 2 (Currently Amended): The polynucleotide of Claim 1, wherein the polynucleotide has the sequence of ~~SEQ ID NO: 1~~ or SEQ ID NO: 3.

Claim 3 (Original): The polynucleotide of Claim 1, wherein the polynucleotide has the activity of repressing flowering-promoting gene *AGL20*.

Claim 4 (Original): An antisense oligonucleotide of the polynucleotide of Claim 1.

Claim 5 (Original): A recombinant vector comprising the polynucleotide of Claim 1.

Claim 6 (Original): A cell comprising the polynucleotide of Claim 1.

Claim 7 (Original): A plant comprising the polynucleotide of Claim 1.

Claim 8 (Original): A plant tissue or seed derived from the plants of Claim 7.

Claim 9 (Original): A method for delaying the flowering time of plants, comprising the step of introducing the polynucleotide of Claim 1 into the plants, wherein the polynucleotide is operably linked to an expression control sequence.

Claim 10 (Original): The method of Claim 9, wherein the plants is monocotyledon or dicotyledon.

Claim 11 (Original): A method for promoting the flowering time of plants, which comprising the steps of introducing an antisense molecule into the plants.

Claim 12 (Original): The method of Claim 11, wherein the antisense molecule is selected from the group consisting of triplex agent, ribozyme, RNAi, and antisense nucleic acid.

Claim 13 (Original): The method of Claim 11, wherein the plants is monocotyledon or dicotyledon.

Claim 14 (Original): A method for identifying a compound controlling the flowering time of plants, comprising the steps of:

culturing a recombinant cell comprising the polynucleotide of Claim 1 and a candidate substance; and

measuring the effect of the candidate substance on the expression of the polynucleotide.

Claim 15 (Original): A method for screening a gene controlling the flowering time of plants, which comprises using the polynucleotide of Claim 1 as a primer or probe.